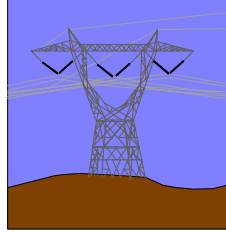


Programs In Review

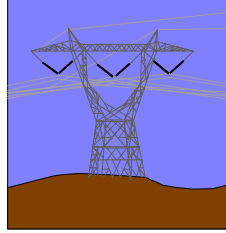
Transmission Business Line Operation & Maintenance

Where We Are — Where We're Going

Fred Johnson

Vice President Transmission Field Services

BONNEVILLE POWER ADMINISTRATION

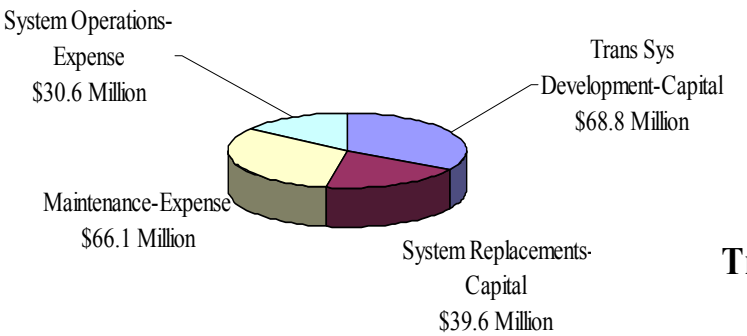


Keys To Our Success

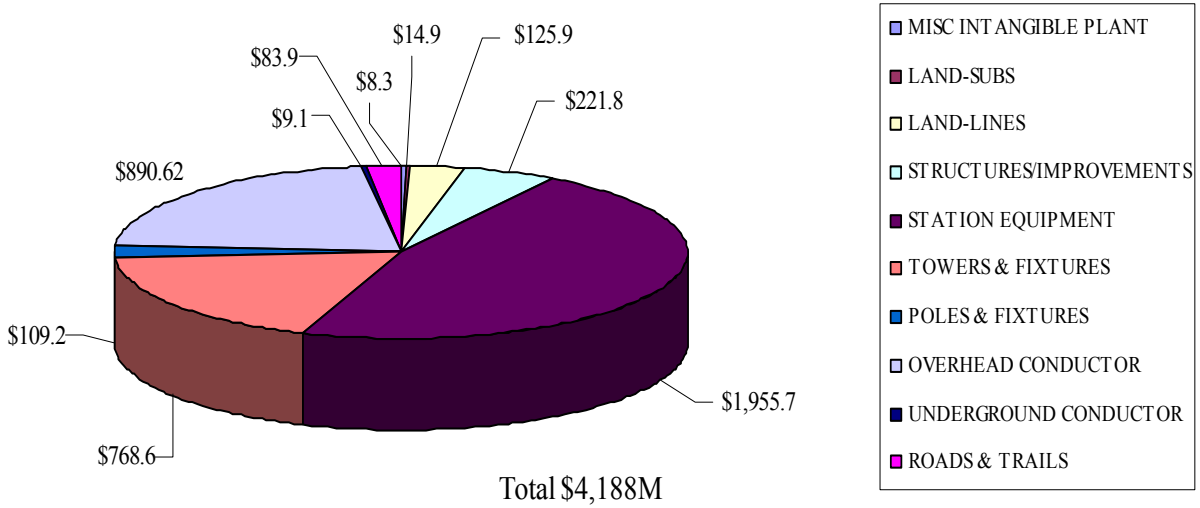
- Reliability
- Availability
- Safety
- Efficiency and Productivity
- Employee Development – Present and Future

Operations & Maintenance

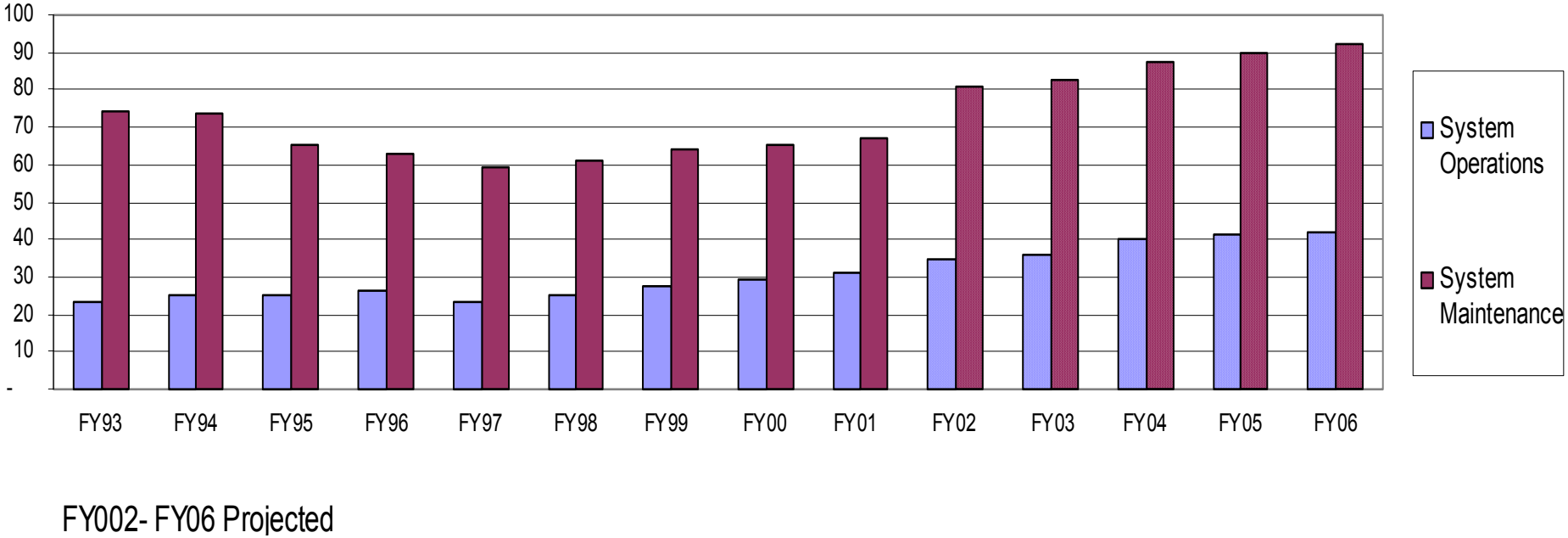
FY 01 Actual Costs



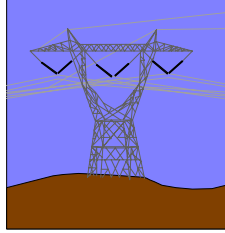
Transmission Plant Investment as of 09/30/01 Dollars in Millions



O&M History and Projections

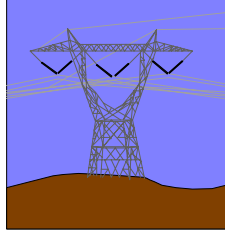


FY002- FY06 Projected



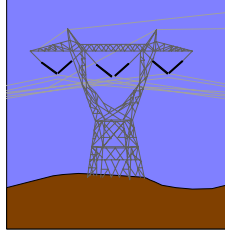
O&M Expenses Rising

- Need for new infrastructure projects
- TBL's efforts to manage a constrained system.
- Additional staff needed for O&M to assure work accommodates traffic on the lines, while protecting reliability.



Maximizing Use of Resources

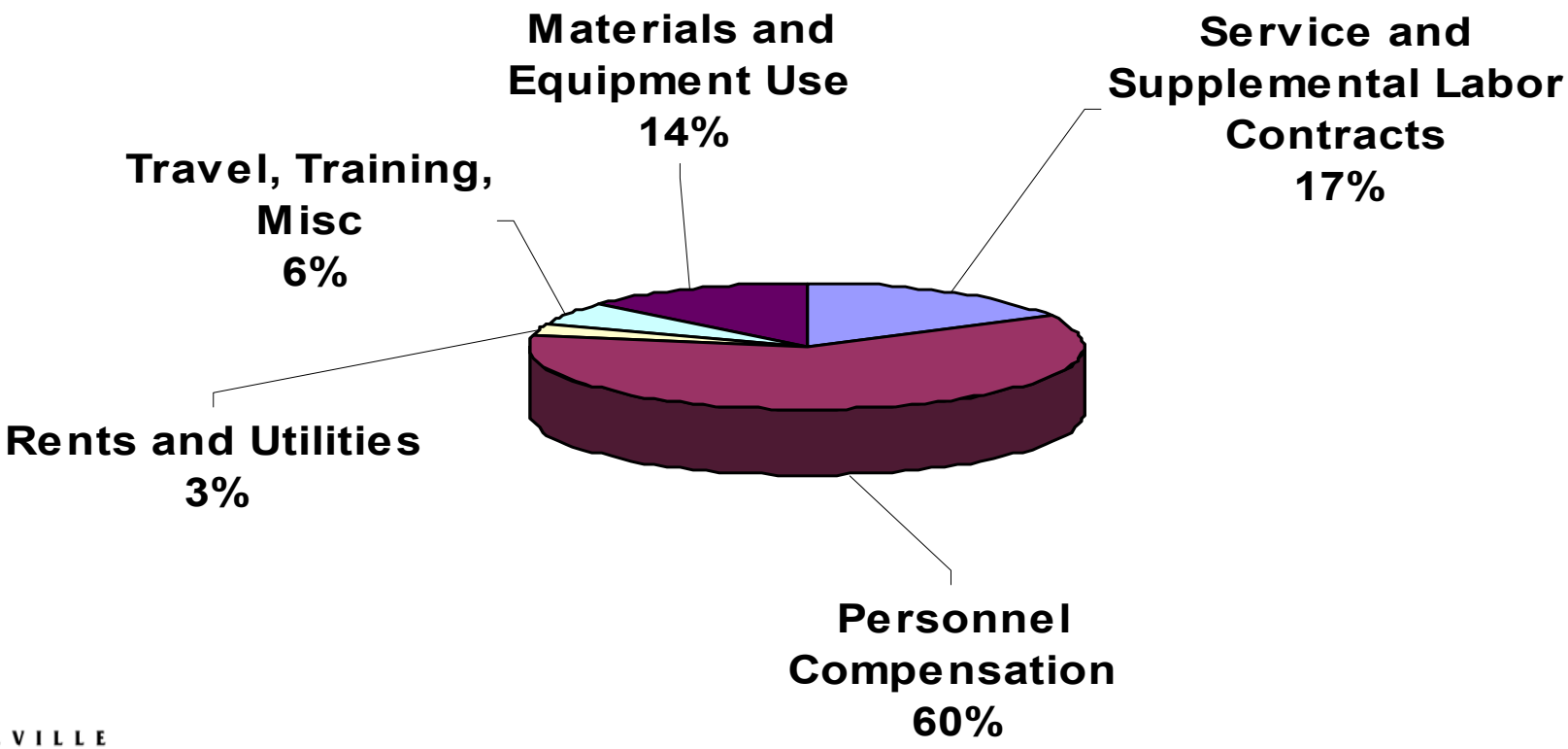
- Increase availability/maintain reliability:
  - Using existing resources and implementing new work practices
  - Focus on core business – sale of delivery facilities
  - Workload and staffing based on equipment inventories and Emergency Response Levels
  - Supplement crews with contractors during peak season work
  - Bundling work



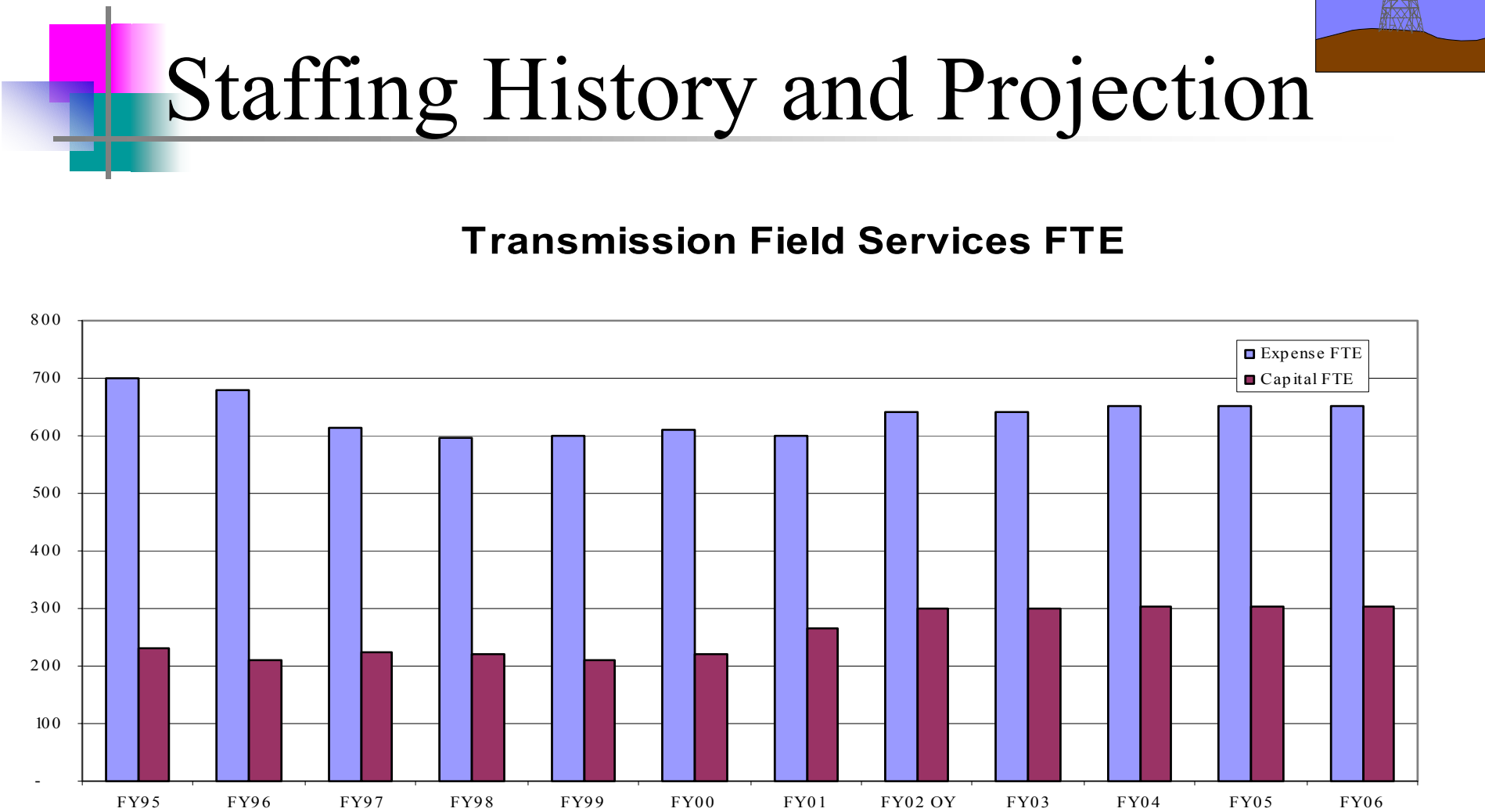
O&M Cost Reductions

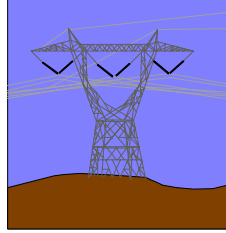
- Preliminary FY03 O&M program budget cut $11 million.
- These program levels delayed to FY04, but without inflation. Major areas of reduction include:
  - Service contracts
  - Non-electric maintenance and substation work
  - Delay in hiring and training
  - Delay in various software acquisitions
  - Reduce enhancements in training curriculum and facilities

O&M – FY02 Resource Breakdown



Staffing History and Projection

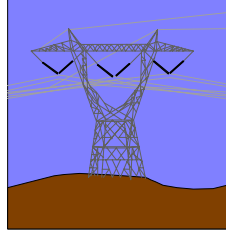




Reliability is Still Important

- System Reliability remains a high priority:
  - Reliability Center Maintenance is the cornerstone of our maintenance program.
  - Until the infrastructure projects are complete, keeping the existing system going creates many challenges.
  - Outage coordination is increasingly more difficult with several last minute changes.
- We must continue to maintain and replace aging or failing equipment.

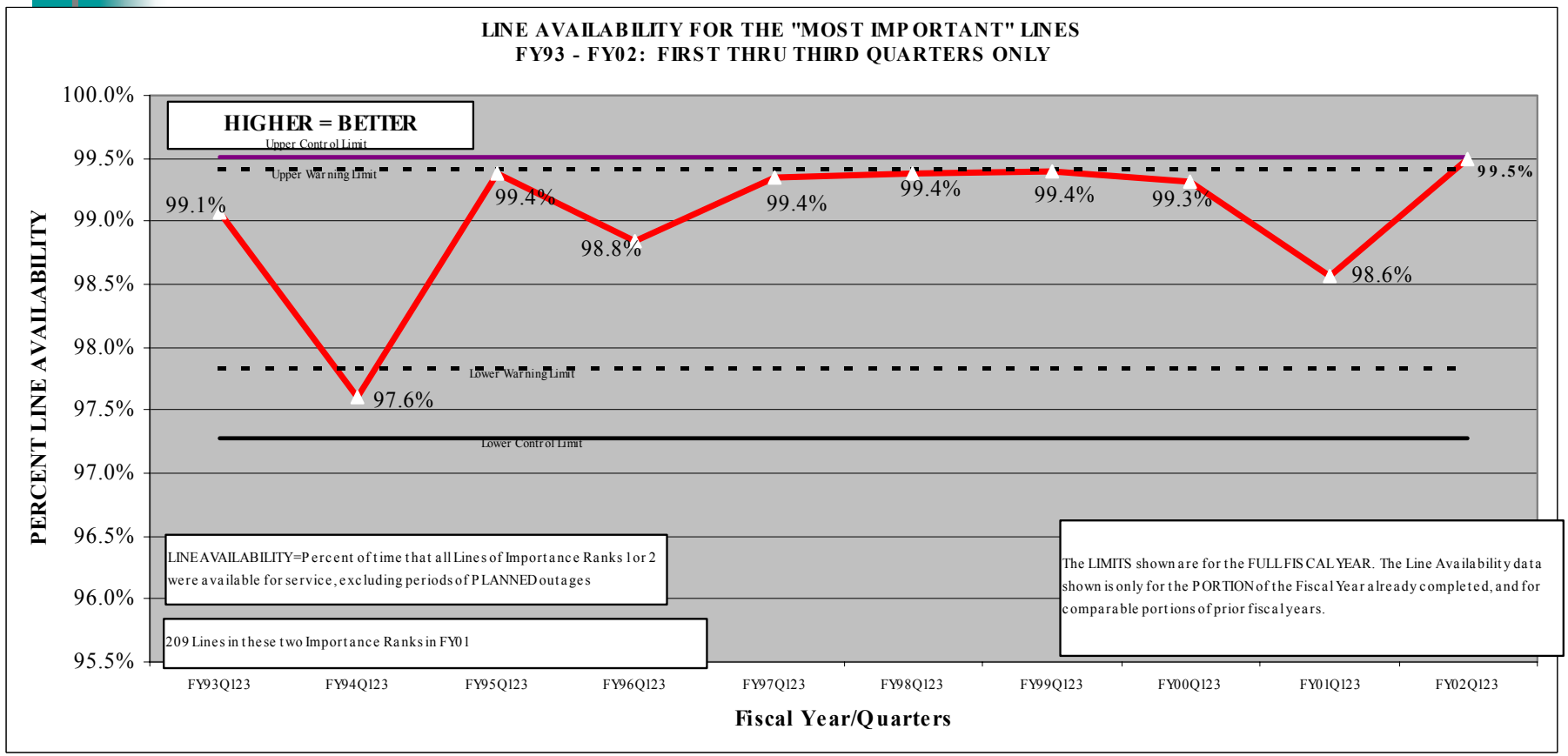
Emerging Market Drivers & System Availability



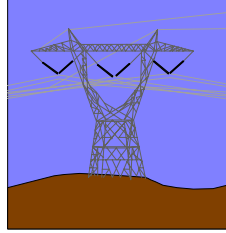
• System Availability is a primary driver for transmission system operations in a deregulated market. The result is upward pressure on O&M expenses:

- Working off-peak outages and reduced outage windows – increased overtime and travel
- Implementation of new O&M work practices such as hot line maintenance – training, tools and equipment

Line Availability FY93–FY02

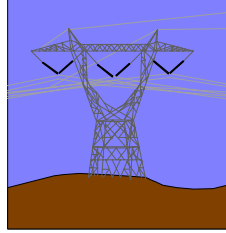


Other Pressures on System Maintenance



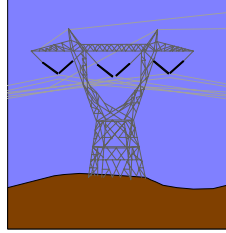
- System changes and environmental issues concerning fish and wildlife habitat conservation and enhancement have caused BPA to develop and implement programs that respond to these issues.
- Vegetation Management Program
  - Implement 2000 Vegetation Management Environmental Impact Statement (EIS) --Integrated approach of manual, biological and chemical practices.
- Access Road Program
  - System-wide access road prioritization process

BONNEVILLE POWER ADMINISTRATION



O&M Summary

- Reliability and Safety are our foremost concerns
- Maximizing efficiency of the workforce:
  - Staffing adjustments
  - Need tools and work equipment for new work practices
  - Scarcity of skilled workforce



O&M Summary

- Significant ongoing economic pressures
  - Maintaining an aging system
  - Environmental Responsibilities
- New realities of the expanding market:
  - Need to assure system availability
  - Additional overtime costs driven by outage availability
  - System flexibility is not what it used to be